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EXTERNAL SKIN CARE PREPARATION
[HIFU GAIYOZAI]

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[Claim]

[Claim 1]

An external skin care preparation characterized as containing one, two or more types selected from the following: cola de caballo extract (of genus *Equisetum* of family *Equisetaceae*; academic name: *Equisetum giganteum*); a Yawar piri-piri extract (of genus *Eleucerine* of family *Iridaceae*; academic name: *Eleucerine plicata*); a jurubeba paiz extract (of genus *Solanum* of family *Solanaceae*; academic name: *Solanum paniculatum*); a Musali extract (of genus *Withania* of family *Solanaceae*; academic name: *Withania somnifera*); a cocohuite extract (of genus *Gliricidae* of family *Leguminaceae*; academic name: *Gliricidae sepium*); a Hamula extract (of genus *Brickellia* of family *Compositae*; academic name: *Brickellia cabanillesy*); spearmint extract (of genus *Mentha* of family *Labitae*; academic name: *Mentha spicata*, *Mentha gentilis*); a Potantilla tormentilla extract (of genus *Potentilla* of family *Rosaceae*; academic name: *Potantilla tormentilla*); a Lempuyang extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber aromaticum Mal.*); a Bengle extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber cassumunar*); a Zingiber zerumbet

extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiberzerumbet SM.*); a Zingiber amaricans extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber amaricans BI.*); a Gingiber littorale extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Gingiber littorale Val.*); an Aesculus hippocastanum extract (of genus *hippocastanum* of family *Hippocastanaceae*; academic name: *Aesculus hippocastanum*); a Rosa centifolia L. extract (of genus *Rosa* of family *Rosacease*; academic name: *Rosa Centifolia L.*); a Japanese coptis extract (of genus *Coptis* of family *Ranunculaceae*; academic name: *Coptis japonica Makino*); a sage extract (of genus *Salvia officinalis* of family *Labiatae*; academic name: *Salvia officinalis Linne*); a Crataegus fruit extract (of genus *Crataegus* of family *Rosaceae*; academic name: *Crataegus cuneata Siebold et Zuccarini*); and an acylated derivative of glycosyl-L-ascorbic acid;

[Claim 2]

An external skin care preparation as described in Claim 1 wherein the glycosyl-L-ascorbic acid of the glycosyl-L-ascorbic acid acylated derivative is 2-glucopyranosyl-L-ascorbic acid or 2-galactopyranosyl-L-ascorbic acid;

[Claim 3]

An external skin care preparation as indicated in Claim 1 or Claim 2 wherein the acyl group of the glycosyl-L-ascorbic acid acylated derivative has a basic skeleton of a lower fatty acid or a higher fatty acid;

[Claim 4]

An external skin care preparation as described in either of Claims 1 through 3 wherein the number of carbon atoms in the acyl group in the glycosyl-L-ascorbic acid acylated derivative is an integer selected from 3 to 20;

[Claim 5]

An external skin care preparation as described in either of Claims 1 through 4 wherein the glycosyl-L-ascorbic acid acylated derivative is a monoacylated derivative;

[Claim 6]

An external skin care preparation as described in either of Claims 1 through 5 wherein the hydroxyl group in the sixth position in the glycosyl-L-ascorbic acid residue of the glycosyl-L-ascorbic acid acylated derivative is acylated;

[Claim 7]

An external skin care preparation as described in Claim 1 wherein the amount of the plant extract compounded

is 0.001 to 20.0 wt % of the entire amount of the external skin care preparation; and the amount of the glycosyl-L-ascorbic acid acylated derivative compounded is 0.001 to 10.0 wt % of the entire amount of the external skin care preparation;

[Claim 8]

An external skin care preparation as described in Claim 1 which is a whitening external skin care preparation.

[Detailed Description of Invention]

[0001]

[Technical Field]

The present invention relates to an external skin care preparation having a strikingly improved skin whitening effect and outstanding stability and safety.

[0002]

[Prior Art]

Spots and freckles and other pigment depositions are caused by hormone abnormalities and ultraviolet ray irritation and occur when melanin production is accelerated inside the epidermal pigment cell and the melanin is deposited in excess in the epidermis. Methods used to

prevent spots and freckles include the method which involves administering large amounts of substances which inhibit the generation of melanin such as L-ascorbic acid; the method which involves injections of glutathione and the like; the method which involves coating on kojic acid, cysteine and the like in the form of a cream, a lotion and the like.

[0003]

[Problems Which the Present Invention is Intended to Solve]

Nevertheless, many of these presented problems with stability, safety and odor and the like and the effect was weak and there none were satisfactory.

[0004]

[Means Used to Solve the Problems]

The inventors took note of this situation and after a great deal of hard work and research on obtaining an external skin care preparation having an outstanding whitening effect, found that combining plant extracts having a whitening effect and glycosyl-L-ascorbic acid acylated derivatives provided a synergistic whitening effect which was superior when these were used individually and the stability was improved and they attained the

present invention.

[0005]

This means that the present invention is an external skin care preparation characterized as containing one, two or more types of plant extracts selected from the following: cola de caballo extract (of genus *Equisetum* of family *Equisetaceae;* academic name: *Equisetum giganteum*); a Yawar piri-piri extract (of genus *Eleucerine* of family *Iridaceae;* academic name: *Eleucerine plicata*); a jurubeba paiz extract (of genus *Solanum* of family *Solanaceae;* academic name: *Solanum paniculatum*); a Musali extract (of genus *Withania* of family *Solanaceae;* academic name:

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Withania somnifera); a cocohuite extract (of genus *Gliricidae* of family *Leguminaceae;* academic name: *Gliricidae sepium*); a Hamula extract (of genus *Brickellia* of family *Compositae;* academic name: *Brickellia cabanillesy*); spearmint extract (of genus *Mentha* of family *Labitae;* academic names: *Mentha spicata*, *Mentha gentilis*); a Potantilla tormentilla extract (of genus *Potentilla* of family *Rosaceae;* academic name: *Potantilla tormentilla*); a Lempuyang extract (of genus *Zingiber* of family *Zingiberaceae;* academic name: *Zingiber aromaticum Mal.*); a

Bengle extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber cassumunar*); a Zingiber zerumbet extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiberzerumbet SM.*); a Zingiber amaricans extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber amaricans BI.*); a Gingiber littorale extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Gingiber littorale Val.*); an Aesculus hippocastanum extract (of genus *hippocastanum* of family *Hippocastanaceae*; academic name: *Aesculus hippocastanum*); a Rosa centifolia L. extract (of genus *Rosa* of family *Rosacease*; academic name: *Rosa Centifolia L.*); a Japanese coptis extract (of genus *Coptis* of family *Ranunculaceae*; academic name: *Coptis japonica Makino*); a sage extract (of genus *Salvia officinalis* of family *Labiatae*; academic name: *Salvia officinalis Linne*); a Crataegus fruit extract (of genus *Crataegus* of family *Rosaceae*; academic name: *Crataegus cuneata Siebold et Zuccarini*); and an acylated derivative of glycosyl-L-ascorbic acid.

[0006]

Next, we shall discuss the constitution of the present invention in detail. The plant extracts used in the present

invention are one, two or more types selected from the following: cola de caballo extract (of genus *Equisetum* of family *Equisetaceae*; academic name: *Equisetum giganteum*); a Yawar piri-piri extract (of genus *Eleucerine* of family *Iridaceae*; academic name: *Eleucerine plicata*); a jurubeba paiz extract (of genus *Solanum* of family *Solanaceae*; academic name: *Solanum paniculatum*); a Musali extract (of genus *Withania* of family *Solanaceae*; academic name: *Withania somnifera*); a cocohuite extract (of genus *Gliricidae* of family *Leguminaceae*; academic name: *Gliricidae sepium*); a Hamula extract (of genus *Brickellia* of family *Compositae*; academic name: *Brickellia cabanillesy*); spearmint extract (of genus *Mentha* of family *Labitae*; academic names: *Mentha spicata*, *Mentha gentilis*); a Potantilla tormentilla extract (of genus *Potentilla* of family *Rosaceae*; academic name: *Potantilla tormentilla*); a Lempuyang extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber aromaticum Mal.*); a Bengle extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber cassumunar*); a Zingiber zerumbet extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiberzerumbet SM.*); a Zingiber amaricans extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Zingiber amaricans BI.*); a Gingiber

littorale extract (of genus *Zingiber* of family *Zingiberaceae*; academic name: *Gingiber littorale Val.*); an Aesculus hippocastanum extract (of genus *hippocastanum* of family *Hippocastanaceae*; academic name: *Aesculus hippocastanum*); a Rosa centifolia L. extract (of genus *Rosa* of family *Rosacease*; academic name: *Rosa Centifolia L.*); a Japanese coptis extract (of genus *Coptis* of family *Ranunculaceae*; academic name: *Coptis japonica Makino*); a sage extract (of genus *Salvia officinalis* of family *Labiatae*; academic name: *Salvia officinalis Linne*); a Crataegus fruit extract (of genus *Crataegus* of family *Rosaceae*; academic name: *Crataegus cuneata Siebold et Zuccarini*).

[0007]

When the present invention is worked, one, two or more types of these should be selected as suitable and compounded.

[0008]

Although there are no particular restrictions on the amount of plant extract to be compounded in the external preparation for skin care, generally the amount compounded should be 0.001 to 20.0 wt % and preferably 0.01 to 10.0

wt % and particularly 0.1 to 7.0 wt % relative to the entire amount of the external preparation for skin care. When less than 0.001 is compounded, the whitening effect of the external skin care preparation tends to weaken; conversely, even when more than 20.0 % is compounded, essentially no increase in the whitening effect can be expected and even compounding for the external skin care preparation tends to be difficult.

[0009]

The glycosyl-L-ascorbic acid referred to in the present invention includes all of the glycosyl-L-ascorbic acids having an improved oil solubility due to acylation. A suitable glycosyl-L-ascorbic acid would be one or a plurality of glycosyl residues or galactosyl residues which bond at the second position in the L-ascorbic acid, such as a series of 2-glycolpyranosyl-L-ascorbic acids starting first and foremost with 2-O-α-D-monoglycopyranosyl-L-ascorbic acid as well as a series of 2-galactopyranosyl-L-ascorbic acids starting first and foremost with 2-O-β-D-monogalactopyranosyl-L-ascorbic acid.

[0010]

By acylation in the present invention is meant

introducing an acyl group RCO to said glycosyl-L-ascorbic acid. Here, it indicates generically one or a plurality of hydroxyl groups in the abovementioned glycosyl-L-ascorbic acid and preferably a compound in which an acyl group bonds to one or a plurality of hydroxyl groups of an L-ascorbic acid in glycosyl-L-ascorbic acid. However, a monoacylated derivative is especially suitable.

[0011]

This acylated derivative can be prepared by using a

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variety of methods. For example, when a suitable acylating agent is reacted with glycosyl-L-ascorbic acid, the desired acylated derivative is obtained. At this time, a catalyst may coexist inside a reaction group if necessary and the catalyst may be lipase or other enzyme. The glycosyl-L-ascorbic acid is used to react with cyclomaltodextrin and starch hydrolases and other α-glycosyl compounds are reacted in the presence of cyclomaltodextrin ·glucanotransferase and other glucotransferases, as described in Laid-Open Patent Specification 3-139288, Laid-Open Patent Specification 3-135992 and Laid-Open Patent Specification 3-183492 or by reacting lactose and other β-galactosyl compounds in 5,6-isopropylidene-L-ascorbic acid

in the presence of β-galactosidase, as described in Laid-Open Patent Specification 6-228183 as well as Laid-Open Patent Specification 6-263790. Incidentally, a commercially available form of 2-glucopyranosyl-L-ascorbic acid is [AA-2G] (containing at least 98 % of 2-O-α-D-monoglucopyranosyl-L-ascorbic acid per solid content wt part, manufactured by Hayashibara Shoji Ltd.). Although there are differences depending on the use, in the present invention, the glycosyl-L-ascorbic acid need not necessarily be highly refined and even though it is an affinity and a composition which has not separated from other constituents, it may be a mixture of another compound which does not prevent essential acylation.

[0012]

When carried out by a chemical reaction, the usual general method used to acylate a compound having a hydroxyl group may be used and individual methods such as a method which uses an acid or acid halide, acid anhydride or acid ester or other acylation agent. The number of carbon atoms in the acylating agent used should usually be an integer selected from 3 to 20 and preferably from 4 to 18. For example, propionic acid, butyric acid, n-valerian acid, isovalerianic acid, trimethyl acetic acid, caproic acid,

n-heptanoic acid, caprylic acid, peralgonic acid, capric acid, lauric acid, myristic acid, palmitic acid, palmitoleic acid, stearic acid, oleic acid, licinoleic acid, arachidinic acid, petroselinic acid, vaccenic acid, linolic acid, linoleic acid, eleostearic acid, licanic acid, parinaric acid, “talinic” [phonetic] acid, cadoleic acid and arachidonic acid and other carboxylic acid having lower fatty acid and higher fatty acids as basic skeleton and halide carbonate, carboxylic acid anhydrides and carboxylic acid esters are used.

[0013]

The reaction is carried out in a non-aqueous group wherein the reaction group is shielded from penetration by water. For example, pyridine, dimethyl sulfoxide, dimethyl formamide and other organic solvents and if needed, p-toluene sulfonate and other catalysts are made to coexist, a carboxylic acid anhydride is reacted with glycosyl-L-ascorbic acid or the carboxylic acid itself is reacted with the glycosyl-L-ascorbic acid in the presence of concentration sulfuric acid and other catalysts. The reaction conditions are such that the reaction usually used for acylation of L-ascorbic acid can be applied as is. However, when the acylation agent is used at 3 mols and

under and preferably 2 mols and under for a single glycosyl-L-ascorbic acid mol, the reaction proceeds virtually specifically and the acyl group can be introduced to a specific location in the L-ascorbic acid residue in the glycosyl-L-ascorbic acid. For example, when 2-O-α-D-monoglucopyranosyl-L-ascorbic acid is used, and at most 2 mols of the acylating agent are reacted, only the hydroxyl group in the sixth position in the L-ascorbic acid residue can be acylated. In addition, after only the hydroxyl group in sixth position in the L-ascorbic acid is acylated using a well-known method and when cyclomaltodextrin and starch hydrolase and other α-glucosyl compounds are reacted in L-ascorbic acid which has been acylated in the presence of cyclomaltodextrin · glucanotransferase and other glucotransferases, only the hydroxyl group in sixth position in the L-ascorbic acid residue can obtain a monoacylated derivative of the 2-glucopyranosyl-L-ascorbic acid.

[0014]

When carried out using an enzymatic reaction, glucosyl-L-ascorbic acid and an acylating agent are used as a substrate and usually a suitable organic solvent is used in accordance with these substrates and enzymes. Depending

on the case, a two component group made up of a suitable percentage of water and an organic solvent are used. Lipase is the enzyme generally used and an enzymatic agent may be solidified. The organic solvent used may be sec-butyl alcohol, t-butyl alcohol, t-amyl alcohol, dioxane, tetrahydrofurane, diethyl ether, dichloromethane, pyridine and other hydrophilic organic solvents are used. The reaction conditions can be set to the same as those used for acylation of L-ascorbic acid using the enzymatic method and there are no particular restrictions on the type of enzyme used. Furthermore, glycosyl-L-ascorbic acid, in particular, 2-glycopyranosyl-L-ascorbic acid has a stability in aqueous solutions which is strikingly high so that, unlike the acylation of L-ascorbic acid, complex conditions need not be set.

[0015]

The acylated derivative obtained in this way can be refined by applying the usual method to refine fatty acid esters of L-ascorbic acid. Individual refining methods include salting out, dialysis, filtration, concentration, differential sedimentation, separation extraction, gel chromatography, ion replacement chromatography, high-performance liquid chromatography, gas chromatography,

affinity chromatography, gel electrophoresis, isoelectric focusing, crystallization and the like. These are used by combining as suitable according to the reaction conditions and the type of purity of the acylation derivative desired.

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[0016]

The acylated derivatives of glycosyl-L-ascorbic acid used in the present invention have the following characteristics.

(1) Compared to L-ascorbic acid and the well-known inorganic acid esters, the oil solubility is high. Moreover, when the chain length of the alkyl group in the acylating agent is either increased or decreased, oil solubility is provided and an essential water solubility can be retained.

(2) Unlike the well-known fatty acid esters and the inorganic acid esters, the L-ascorbic acid is liberated inside the bioorganism so that the physiological action inherent to the ascorbic acid can be expected and the safety is high.

(3)Unlike L-ascorbic acid, it is extremely stable in heat, light, oxygen and metal ions.

(4) Unlike L-ascorbic acid, a direct reduction characteristics are not exhibited so that Mehrad's reaction

and other reactions are not brought about.

(5) Unlike L-ascorbic acid and well-known inorganic acid esters, it is high permeability in the skin and the mucosa.

(6) Like L-ascorbic acid, it is characteristic in that it captures radicals which are generated inside the bioorganism.

(7) While this depends on the type and degree of refinement of the acylation agent, it is generally tasteless, odorless and colorless.

[0017]

Because of these characteristics, the acylated derivative used in the present invention is not only stable under oxidation conditions but is philolipic as the number of carbon atoms in the fatty acid part strengthens and it has outstanding permeability in the skin tissues. In addition, the sugar and fatty acid are separated enzymatically inside the bioorganism due to the α-glucosidase and the esterase and become ascorbic acid and brings out the whitening effect of vitamin C which has always been well known. Meanwhile, since the sugar and fatty acid generated inside the body are both used as energy, the safety of the acylated derivative of the glycosyl-L-ascorbic acid inside the body is guaranteed. Of

the acylated derivatives used in the present invention, acylated derivatives to which is bonded an acyl group having a comparatively long chain lengths, in particular, acylated derivatives to which is bonded an acyl group having a number of carbon atoms which is an integer of 8 or above have a strikingly high permeability in the skin and the mucosa so that these are useful in fields such as cosmetics and drugs.

[0018]

Specific examples of the acylated derivative of the glycosyl-L-ascorbic acid used in the present invention are as follows: 6-O-butyryl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid, 2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid, 2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid, 6-O-decanoyl-2-O-α-D-monoglucopyranosol-L-ascorbic acid, 6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid, 6-O-myristoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid, 6-O-palmitoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid or 6-O-stearoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid and the like.

[0019]

The inventors found that that the whitening effect was

increased synergistically and that the problems involved in the stability of the well-known prior-art whitener could be solved when a plant extract having a whitening effect which is the well-known prior-art whitener was used in combination with a glycosyl-L-ascorbic acid acylated derivative.

[0020]

Although there are no particular restrictions on the amount of acylated derivative of the glycosyl-L-ascorbic acid to be compounded, generally, 0.001 to 10.0 wt % and preferably 0.01 to 7.0 wt % should be compounded relative to the entire amount of the external skin care preparation. When less than 0.001 wt % is compounded, the whitening effect of the external skin care preparation is insufficient and the effect of inhibiting the skin irritation characteristics of the external skin care preparation tends to be poor. Conversely, even when more than 10.0 wt % is compounded, one cannot expect that the effect will essentially increase and compounding for the external skin care preparation tends to be difficult.

[0021]

Besides the abovementioned necessary constituents for

the external skin care preparation, other constituents to be used for regular cosmetics and medications and other external skin care preparations such as an oily portion, a wetting agent, antioxidant, surface active agent, preservative, moisturizer, fragrance, water, alcohol, sensitizer and the like may be compounded as needed.

[0022]

Any formulation may be used for the external skin care preparation in the present invention, such as cosmetic water and other solubilizing groups, emulsions, creams and other emulsification groups or unguents, dispersed solutions and any other formulation.

[0023]

[Practical Examples]

Next, we shall explain the present invention in greater detail by providing practical examples of it. However, it should by no means be construed that the technical parameters of the present invention are restricted to these practical examples. Furthermore, the amount compounded in the following practical examples is wt %.

[0024]

Practical Examples 1 to 8, Comparative Examples 1 to 9

(Alcohol phase)

95% ethanol	25.0 wt %
Polyoxy ethylene (25 mol) cured castor oil ether	2.0
2-hydroxy-4-methoxy benzophenone-5-sulfonate	3.0
Preservative · antioxidant	Suitable amount
Fragrance	Suitable amount

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Medication (indicated in Table 1, Table 2)

(water phase)

Glycerol	2.0
Propylene glycol	1.0
Ion exchange water	balance

[Method of Preparation]

After the water phase and the alcohol phase have been prepared, they are solubilized. The method of preparing the 6-0-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid used here is as follows.

[0025]

(1) The method of preparing 6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid is as follows.

We took 2.7 g (8.0 mmol) of 2-glucopyranosyl-L-ascorbic acid (commercial name: [AA-2G], more than 98 % of 2-O-α-D-monoglucopyranosyl-L-ascorbic acid per solid wt %, sold by Hayashi Shoji Ltd.) and 350 ml of pyridine to a reaction container in an argon gas air current and stirred it until it dissolved. Next, we added anhydrous lauric acid (9.6 mmol) which had been dissolved in 50 ml of pyridine in an argon gas air current drop by drop in a reaction container for two minutes and then reacted it for 165 minutes at room temperature. Then, we added methanol to a reaction container, concentrated it, allowed it to dry and solidify and stopped the reaction.

[0026]

We loaded the solid reaction mixture obtained (4.65 g) on a 139.5 g column of a column chromatography silica gel (commercial name, "Wako Gel", produced by Wako Junyaku Industries Ltd.) and passed it through a solution of 500 ml of ethyl acetate, 500 ml of an ethyl acetate/methanol mixed

solution (volume ratio of 9:1), 500 ml of an ethyl acetate/methanol mixed solution (volume ratio of 8:2) and 500 ml of an ethyl acetate/methanol mixed solution (volume ratio of 7:3) respectively in that order. Meanwhile, we took out the effluent in 100 ml portions. We took part of each of the elution fractions and dropped small amounts of these on a thin layer chromatography silica gel plate (commercial name: "Silica Gel 60, F254", made by Merck Ltd.). Then we allowed it to dry and spread it using an ethyl acetate/methanol mixed solution (volume ratio: 6:4). After we spread it, we dried the plate. When we irradiated ultraviolet rays having a wavelength of 254 nm, we took the elution fractions from the column containing the constituents which had moved near Rf0.42, combined them, concentrated it, allowed it to dry and become a solid.

[0027]

We refined the solid (2.09 g) obtained using the same column chromatography as above and removed the elution fractions from the column containing the constituents which had moved near Rf 0.42 in thin-layer chromatography, combined them, concentrated it, allowed it to dry and form a solid. Then, we obtained 1.93 g (yield of 46.4 %) of 6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid in

the form of taste-less, odorless fine white grains.

[0028]

We determined the whitening effect based on tests involving the pigment effect on the skin and on the elimination of spots and freckles using the lotion using cumulative coating using the lotion in Practical Examples 1 through 8 and Comparative Examples 1 through 9. The test methods and the evaluation method are indicated as follows. Results are indicated in Table and Table 2.

[0029]

(Test Method) We used a test group made up of 20 subjects who had complained of dark skin, spots and freckles and had them coat on the lotion in Practical Examples 1 through 8 and Comparative Examples 1 through 9 in the morning and the evening for three months over the entire face. After three months, we studied the whitening effect and evaluated the degree of dark skin, spots and freckles in seven grades.

[0030](Criteria)

1: No dark skin, spots and freckles.

2: Slight dark skin, spots and freckles.

3: Mild dark skin, spots and freckles.

4: Mild to moderate dark skin, spots and freckles.

5: Moderate dark skin, spots and freckles.

6: High to moderate dark skin, spots and freckles

7: High degree of dark skin, spots and freckles

[0031] (Determination)

©: at least 80 % of test subjects having improvement of at least two stages (efficacy).

O: more than 50 % and fewer than 80 % of test subjects having improvement of at least two stages.

Δ: more than 30 % and fewer than 50 % of test subjects having improvement of at least two stages.

X: less than 30 % of test subjects having improvement of at least two stages.

[0032]

[Table 1]

Practical Example	1	2	3	4	5	6	7	8
Cola de caballo extract	1.0							
Jurubeba paiz extract		1.0						
Musali extract			1.0					
Lempuyang extract				1.0				
Hamula extract					1.0			
Zingiber · zerumbet extract						1.0		
Maronie extract							1.0	
Echinacea extract								1.0
6-0-dodecanoyl-2-0-α-D-monoglucopyranosyl-L-ascorbic acid	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Whitening effect	◎	○	○	◎	○	◎	◎	○

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[0033]

[Table 2]

Comparative Example	1	2	3	4	5	6	7	8	9
Cola de caballo extract	2.0								
Jurubeba paiz extract		2.0							
Musali extract			2.0						
Lempuyang extract				2.0					
Hamula extract					2.0				
Zingiber Zerumbet extract						2.0			
Maronie extract							2.0		
Echinacea extract								2.0	
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid									2.0
Whitening effect	Δ	X	Δ	O	X	O	Δ	Δ	O

[0034]

As can be seen from Table 1 and Table 2, it was confirmed that the practical example has a synergistic skin whitening effect which was superior to the comparative examples.

[0035]

Practical Example 9 Vanishing Cream

Stearic acid	6.0 wt %
Sorbitane monostearic acid esters	2.0 wt %
Polyoxy ethylene (20 mol) sorbitane monostearic acid esters	1.5 wt %
Lempuyang extract	7.0 wt %
Sodium hydogensulfite	0.03 wt %
Propylene glycol	10.0 wt %
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	1.0 wt %
Preservative · anti-oxidant	Suitable amount
Fragrance	Suitable amount
Ion exchange water	Balance

(Method of Preparation)

We added the *Lempuyang* extract and the polypropylene to the ion exchange water, heated it and maintained the temperature at 70°C (water phase). We mixed the other constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly using a homomixer. We cooled it to 30°C while stirring well.

[0036]

Practical Example 10 Neutral Cream

Stearyl alcohol	7.0 wt %
Stearic acid	2.0 wt %
Hydrogenated lanolin	2.0 wt %
2-hydroxy-4-methoxy benzophenone	3.5 wt %
Squarane	5.0 wt %
2-octyl dodecyl alcohol	6.0 wt %
Polyoxy ethylene (25 mol) cetyl alcohol ether	3.0 wt %
Glycerol monostearic acid esters	2.0 wt %
Cola de caballo extract	0.1 wt %
Propylene glycol	5.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	5.0 wt %
Fragrance	Suitable amount
Preservative · antioxidant	Suitable amount
Ion exchange water	Balance

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(Method of Preparation)

We added the propylene glycol to the ion exchange water, heated it and maintained the temperature at 70°C (water phase). We mixed the other constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly using a homomixer. After we emulsified it, we cooled it to

30°C while stirring well.

[0037]

Practical Example 11 Cold Cream

Solid paraffin	5.0 wt %
Beeswax	10.0 wt %
Vaseline	15.0 wt %
Liquid paraffin	41.0 wt %
Glycerol monostearic acid esters	2.0 wt %
Polyoxy ethylene (20 mol) sorbitane monolauric acid esters	2.0 wt %
Jurubeba paiz extract	2.0 wt %
4-methoxy-4'-t-butyl dibenzoyl methane	3.5 wt %
Soap powder	0.1 wt %
Borax	0.2 wt %
6-O-palmitoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	0.1 wt %
Ion exchange water	Balance
Fragrance	Suitable amount
Preservative · antioxidant	Suitable amount

(Method of Preparation)

We added the *Jurubeba paiz* extract, the soap powder and the borax to the ion exchange water, heated and melted them and maintained the temperature at 70°C (water phase). We mixed the other constituents, heated and melted them and maintained the temperature at 70°C (water phase). We added the oil phase to the water phase gradually while stirring

and carried out a reaction. After the reaction was completed, we emulsified it uniformly using a homomixer. After we emulsified it, we cooled it to 30°C while stirring well.

[0038]

Practical Example 12 Latex

Polyoxy ethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Octyl-p-methoxy cinnamate	3.5 wt %
Silicone KF96 (20 cs) (from Shinetsu Chemicals)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Lempuyang extract	2.0 wt %
Sodium hydrogensulfite	0.03 wt %
Glycerol	2.0 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymer	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	10.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *Lempuyang* extract and the water-soluble constituents in the ion exchange water and the ethanol and maintained the temperature at 70°C (water phase). We mixed the other oil constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly using a homomixer. After we emulsified it, we cooled it to 30°C while stirring it well.

[0039]

Practical Example 13 Latex

Polyoxy ethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Musali extract	5.0 wt %
4-methoxy-4'-t-butyl dibenzoyl methane	3.5 wt %
Glycerol	2.0 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxy propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	7.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the water-soluble constituents under the propylene glycol in the ion exchange water and ethanol and maintained the temperature at 70°C (water phase). We mixed the other oil constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly using a

homomixer. After we emulsified it, we cooled it to 30°C while stirring it well.

[0040]

Practical Example 14 Latex

Polyoxy ethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Glycerol	2.0 wt %
2-hydroxy-4-methoxy benzophenone	3.5 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
Hamula extract	5.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	7.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *Hamula* extract and the water-soluble constituents under propylene glycol to the ion exchange water and maintained the temperature at 70°C (water phase). We mixed the other oil constituents, heated and melted them

and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase and carried out preliminary emulsification. We emulsified it uniformly using a homomixer and after we emulsified it, we cooled it to 30°C while stirring it well.

[0041]

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Practical Example 15 Latex

Polyoxy ethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Glycerol	2.0 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxy propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
Cocohuite extract	3.0 wt %
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	3.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *cocohuite* extract and the water-soluble constituents under propylene glycol to the ion exchange water and maintained the temperature at 70°C (water phase). We mixed the other oil constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to the water phase and carried out preliminary emulsification. After we emulsified it, we cooled it to 30°C while stirring well.

[0042]

Practical Example 16 Latex

Stearic acid	1.5 wt %
Cetyl alcohol	0.5 wt %
Beeswax	2.0 wt %
Polyoxy ethylene (20 mol) monooleic acid esters	1.0 wt %
Glycerol monostearic acid esters	1.0 wt %
Ethanol	10.0 wt %
Tormentilla extract	20.0 wt %
Spearmint oil (compounding constituent standards depending on type of cosmetic)	0.03 wt %
Propylene glycol	5.0 wt %
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	1.0 wt %
Ion exchange water	Balance
Fragrance	Suitable amount
Preservative · antioxidant	Suitable amount

(Method of Preparation)

We added the *tormentilla* extract and the propylene glycol to the ion exchange water, heated and melted it and maintained the temperature at 70°C (water phase). We added the fragrance to the ethanol and dissolved it (alcohol phase). We mixed the other oil constituents, heated and melted them and maintained them at a temperature of 70°C (oil phase). We added the oil phase to the water phase,

carried out preliminary emulsification and emulsified it uniformly in a homomixer. We added the alcohol phase while stirring it. Then, we cooled it to 30°C while stirring it.

[0043]

Practical Example 17 Latex

Microcrystalline wax	1.0 wt %
Beeswax	2.0 wt %
Lanoline	2.0 wt %
Liquid paraffin	20.0 wt %
Squarane	10.0 wt %
Sorbitane sesquioleic acid esters	4.0 wt %
Polyoxy ethylene (20 mol) sorbitane monooleic acid esters	1.0 wt %
Yawar piri-piri extract	5.0 wt %
Sodium hydrogensulfite	0.03 wt %
Cola de caballo extract	5.0 wt %
Propylene glycol	7.0 wt %
6-O-myristyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	2.0 wt %
Octyl-p-methoxy cinnamate	3.5 wt %
Ion exchange water	Balance
Fragrance	Suitable amount
Preservative · antioxidant	Suitable amount

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(Method of Preparation)

We added the *Yawar piri-piri* extract, the *cola de*

caballo extract and the propylene glycol to the ion exchange water, heated it and maintained it at a temperature of 70°C (water phase). We mixed the other constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We gradually added the water phase to the oil phase and emulsified it uniformly using a homomixer. After we emulsified it, we cooled it to 30°C while stirring well.

[0044]

Practical Example 18 Jelly

95 % ethanol	10.0 wt %
Dipropylene glycol	15.0 wt %
Polyoxy ethylene (15 mol) oleyl alcohol ether	2.0 wt %
Zingiber zerumbet extract	0.5 wt %
Sodium hydrogensulfite	0.03 wt %
Ascorbic acid stearate	0.5 wt %
Carboxy vinyl polymer (commercial name: Carbopol 941)	1.0 wt %
Caustic potash	0.15 wt %
L-arginine	0.1 wt %
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	2.0 wt %
Fragrance	Suitable amount
Preservative	Suitable amount
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *zingiber zerumbet* extract and the Carbopol 941 uniformly in the ion exchange water. We dissolved the 6-O-octanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid dipropylene glycol, polyoxyethylene (15 mol) oleyl alcohol ether and the other constituents in the 95 % ethanol and added it to the water phase. Next, we neutralized it with caustic potash and L-arginine and thickened it.

[0045]

Practical Example 19 Peel-off type Pack

(alcohol phase)

95 % ethanol	10.0 wt %
Polyoxyethylene (15 mol) oleyl alcohol ether	2.0 wt %
4-methoxy-4'-t-butyl dibenzoyl methane	3.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	3.0 wt %
Preservative	Suitable amount
Fragrance	Suitable amount

(water phase)

Zingiber amaricanus extract	1.0 wt %
Sodium hydrogensulfite	0.03 wt %
Polyvinyl alcohol	12.0 wt %
Glycerol	3.0 wt %
Polyethylene glycol 1500	1.0 wt %
Ion exchange water	Balance

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(Method of Preparation)

We prepared the water phase at 80°C and cooled it to 50°C. Next, we added the alcohol phase which was prepared at room temperature and then mixed it uniformly and set it aside to cool.

[0046]

Practical Example 20 Pack with Mixed in Powder

(alcohol phase)

95 % ethanol	2.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	7.0 wt %
Preservative	Suitable amount
Fragrance	Suitable amount
Colorant	Suitable amount
Ascorbic acid diolate	1.0 wt %

(water phase)

Lempuyang extract	1.0 wt %
Propylene glycol	7.0 wt %
Zinc white	25.0 wt %
Kaolin	20.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We processed the water phase uniformly at room temperature. Next, we added the alcohol phase which had been processed at room temperature and mixed it evenly.

[0047]

Practical Example 21 Water-Absorbent Ointment

Vaseline	40.0 wt %
Stearyl alcohol	18.0 wt %
Japan wax	20.0 wt %
Polyoxy ethylene (10 mol) monooleic acid esters	0.25 wt %
Glycerol monostearic acid esters	0.25 wt %
Spearmint extract	1.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	10.0 wt %
Ion exchange water	**Balance**

(Method of Preparation)

We added the spearmint extract to the ion exchange water and maintained the temperature at 70°C (water phase). We mixed and dissolved the other constituents at 70°C (oil phase). We added the oil phase to the abovementioned water phase, emulsified it uniformly in a homomixer and cooled it.

[0048]

Practical Example 22 Solid Foundation

Talc	43.1 wt %
Kaolin	15.0 wt %
Selicite	10.0 wt %
zinc white	7.0 wt %
Titanium dioxide	3.8 wt %
Yellow ferrous oxide	2.9 wt %
Black ferrous oxide	0.2 wt %
6-O-stearoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	0.1 wt %
Bengle extract	1.0 wt %
Squarane	8.0 wt %
Isostearic acid	4.0 wt %
Monooleic acid POE sorbitane	3.0 wt %
Octanoic acid isocetyl	2.0 wt %
Preservative	Suitable amount
Fragrance	Suitable amount

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(Method of Preparation)

We mixed the powdered constituents ranging from the talc to the *Bengle* extract thoroughly in a blender. We added the oil constituents ranging from the squarane to the octanoic acid isocetyl, the preservative and the fragrance to this and mixed thoroughly. Then, we packed it in a container and molded it.

[0049]

Practical Example 23 Vanishing Cream

Stearic acid	6.2 wt %
Sorbitane monostearic acid esters	2.0 wt %
Polyoxyethylene (20 mol) sorbitane Monosteric acid esters	1.5 wt %
Maronie extract	5.0 wt %
Sodium hydrogensulfite	0.03 wt %
Propylene glycol	10.0 wt %
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	1.0 wt %
Preservative · antioxidant	Suitable amount
Fragrance	Suitable amount
Ion exchange water	Balance

(Method of Preparation)

We added the *maronie* extract and the propylene glycol to the ion exchange water, heated it and maintained the temperature at 70°C (water phase). We mixed the other constituents, heated and melted them and maintained the temperature at 70°C. We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly using a homomixer. Then, we cooled it to 30°C while stirring well.

[0050]

Practical Example 24 Latex

Polyoxyethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Octyl-p-methoxy cinnamate	3.5 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Echinacea angustifolia extract	2.0 wt %
Sodium hydrogensulfite	0.03 wt %
Glycerol	2.0 w %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	10.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *Echinacea angustifolia* extract and the water-soluble constituents under propylene glycol in ion exchange water and ethanol and maintained the temperature at 70°C (water phase). We mixed the other oil constituents, heated and melted them and maintained the temperature at 70°C (oil phase). We added the oil phase to

the water phase, carried out preliminary emulsification and emulsified it uniformly using a homomixer. After we emulsified it, we cooled it to 30°C while stirring well.

[0051]

Practical Example 25 Latex

Polyoxyethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity	3.0 wt %
Propylene glycol	5.0 wt %
Glycerol	2.0 wt %
2-hydroxy-4-methoxy benzophenone	3.5 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
Zingiber littorale extract	5.0 wt %
2-O-α-D-monoglucopyranosyl-6-octanoyl-L-ascorbic acid	7.0 wt %
Ion exchange water	Balance

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(Method of Preparation)

We dissolved the *Zingiber littorale* extract and the water-soluble constituents under propylene glycol in ion

exchange water and ethanol and maintained this at 70°C (water phase). We mixed the other oil constituents, heated and melted them and maintained this at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly in a homomixer. After emulsified it, we cooled it to 30°C while stirring well.

[0052]

Practical Example 26 Latex

Stearic acid	1.5 wt %
Cetyl alcohol	0.5 wt %
Beeswax	2.0 wt %
Polyoxy ethylene (20 mol) monooleic acid esters	1.0 wt %
Glycerol monostearic acid esters	1.0 wt %
Ethanol	10.0 wt %
Maronie extract	20.0 wt %
Spearmint oil (standards for constituents compounded depending on type of cosmetics)	0.03 wt %
Propylene glycol	5.0 wt %
6-O-dodecanoyl-2-O-α-D-monoglucopyranosyl-L-ascorbic acid	1.0 wt %
Ion exchange water	Balance
Fragrance	Suitable amount
Preservative · antioxidant	Suitable amount

(Method of Preparation)

We added the *maronie* extract and the propylene glycol to ion exchange water, heated this and melted it and maintained it at 70°C (water phase). We added the fragrance to the ethanol and melted it (alcohol phase). We mixed the other oil constituents, heated and melted them and maintained this at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly in a homomixer. We added the alcohol phase while mixing this. Then, we cooled it to 30°C while stirring well.

[0053]

Practical Example 27 Latex

Polyoxy ethylene (20 mol) polyoxypropylene (2 mol) cetyl alcohol	1.0 wt %
Octyl-p-methoxy cinnamate	3.5 wt %
Silicone KF96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Rosa centifolia extract	2.0 wt %
Sodium hydrogensulfite	0.03 wt %
Glycerol	2.0 wt%
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	10.0 wt %
Ion exchange water	Balance

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(Method of Preparation)

We dissolved the *Rosa centifolia* extract and the water-soluble constituents under propylene glycol in ion exchange water and ethanol and kept this at 70°C (water phase). We added the other oil constituents, heated and melted them and maintained this at 70°C (oil phase). We

added the oil phase to the water phase, carried out preliminary emulsification and emulsified it uniformly in a homomixer. After we emulsified it, we cooled it to 30°C while stirring well.

[0054]

Practical Example 28 Latex

Polyoxy ethylene (20 mol) polyoxypropylene (2 mol) cetyl alcohol)	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Rhei rhizoma extract	5.0 wt %
4-methoxy-4'-t-butyl dibenzoyl methane	3.5 wt %
Glycerol	2.0 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymer	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
2-O-α-D-monoglucopyranosyl-6-O-hexanoyl-L-ascorbic acid	7.0 wt %
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *Rhei rhizoma* extract and the water-

soluble constituents under propylene glycol in ion exchange water and ethanol and kept it at 70°C (water phase). We mixed the other oil constituents, heated and melted them and kept them at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified uniformly it in a homomixer. After we emulsified it, we cooled it to 30°C while stirring well.

[0055]
Practical Example 29 Latex

Polyoxyethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (from Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Glycerol	2.0 wt %
2-hydroxy-4-methoxy benzophenone	3.5 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
Sage extract	5.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-decanoyl-L-ascorbic acid	7.0
Ion exchange water	Balance

(Method of Preparation)

We dissolved the sage extract and the water-soluble constituents under propylene glycol in the ion exchange

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water and the ethanol and kept it at 70°C (water phase). We mixed the other oil constituents, heated and melted them and kept it at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and

emulsified it uniformly in a homomixer. After emulsifying, we cooled it to 30°C while stirring well.

[0056]
Practical Example 30 Latex

Polyoxy ethylene (20 mol) polyoxy propylene (2 mol) cetyl alcohol	1.0 wt %
Silicone KF 96 (20 cs) (Shinetsu Chemical)	2.0 wt %
Liquid paraffin (medium viscosity)	3.0 wt %
Propylene glycol	5.0 wt %
Glycerol	2.0 wt %
Ethanol	15.0 wt %
Carboxy vinyl polymers	0.3 wt %
Hydroxyl propyl cellulose	0.1 wt %
KOH	Suitable amount
Preservative	Suitable amount
Crataegus berry extract	3.0 wt %
2-O-α-D-monoglucopyranosyl-6-O-octanoyl-L-ascorbic acid	3.0
Ion exchange water	Balance

(Method of Preparation)

We dissolved the *Crataegus* berry extract and the constituents which were water-soluble in the propylene glycol in the ion exchange water and kept them at 70°C. We mixed the other oily constituents, heated and melted them and kept them at 70°C (oil phase). We added the oil phase to the water phase, carried out preliminary emulsification and emulsified them uniformly using a homomixer. After emulsification, we cooled them to 30°C while stirring well.

[0057]

The external skin care preparations obtained in Practical Examples 9 through 30 were confirmed to have the same effect as in Practical Examples 1 through 8 in the same whitening effect tests as were carried out in Practical Examples 1 through 8.

[0058]

[Effect of Invention]

As has been explained above, the external skin care preparation in the present invention has a striking skin whitening effect and has highly improved safety.